WHAT IS CLAIMED IS:

1. A method for treating a mammal having an APP processing disorder comprising administering to the mammal a controlled release composition comprising a therapeutically effective amount of at least one HMG-CoA reductase inhibitor.

2. The method of claim 1, wherein the APP processing disorder is Alzheimer's disease or Down's Syndrome.

3. The method of claim 1, wherein the mammal is human.

4. The method of claim 1, wherein the composition further comprises a pharmaceutically acceptable excipient.

5. The method of claim 1, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of mevastatin, pravastatin, simvastatin, atorvastatin, lovastatin, rivastatin, fluvastatin, and pharmaceutically acceptable salts, isomers and active metabolite forms thereof.

6. The method of claim 5, wherein the HMG-CoA reductase inhibitor is lovastatin or lovastatin acid.

7. The method of claim 3, wherein about 10 mg to about 60 mg of the HMG-CoA reductase inhibitor is administered per day.

8. The method of claim 1, wherein about 0.2 mg to about 10 mg of the HMG-CoA reductase inhibitor per Kg of the mammal's body weight is administered per day.

9. The method of claim 1, wherein the composition comprises an amount of the HMG-CoA reductase inhibitor such that the average blood plasma concentration of the HMG-CoA reductase inhibitor or an active metabolite thereof at steady-state is below about 50 ~~micromolar.~~ nanomolar.

10. The method of claim 9, wherein the average blood plasma concentration of the HMG-CoA reductase inhibitor or an active metabolite thereof at steady-state is below about 40 micromolar.

11. The method of claim 9, wherein the average blood plasma concentration of the HMG-CoA reductase inhibitor or an active metabolite thereof at steady-state is below about 30 micromolar.

12. The method of claim 9, wherein the average blood plasma concentration of the HMG-CoA reductase inhibitor or an active metabolite thereof at steady-state is below about 20 micromolar.

13. The method of claim 9, wherein the average blood plasma concentration of the HMG-CoA reductase inhibitor or an active metabolite thereof at steady-state is below about 10 micromolar.

14. The method of claim 9, wherein the average blood plasma concentration of the HMG-CoA reductase inhibitor or an active metabolite thereof at steady-state is below about 5 micromolar.

15. The method of claim 9, wherein the average blood plasma concentration of the HMG-CoA reductase inhibitor or an active metabolite thereof at steady-state is below about 1 micromolar.

16. The method of claim 9, wherein the average blood plasma concentration of the HMG-CoA reductase inhibitor or an active metabolite thereof at steady-state is about 0.5 micromolar.

17. A method for treating a mammal having an APP processing disorder comprising lowering the amount of Aβ peptides in the brain, cerebral spinal fluid, or plasma of the mammal

by administering to the mammal a controlled release composition having a therapeutically effective amount of at least one HMG-CoA reductase inhibitor.

18. The method of claim 17, wherein lowering the amount of Aβ peptides in the brain comprises affecting APP_m processing.

19. The method of claim 17, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of mevastatin, pravastatin, simvastatin, atorvastatin, lovastatin, rivastatin, fluvastatin, and pharmaceutically acceptable salts, isomers and the active metabolite forms thereof.

20. A method for treating a mammal having an APP processing disorder comprising increasing the clearance of Aβ peptides in the brain, cerebral spinal fluid, or plasma of the mammal by administering to the mammal a controlled release composition having a therapeutically effective amount of at least one HMG-CoA reductase inhibitor.

21. The method of claim 20, comprising increasing the clearance of Aβ peptides in the brain of the mammal.

22. The method of claim 20, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of mevastatin, pravastatin, simvastatin, atorvastatin, lovastatin, rivastatin, fluvastatin, and pharmaceutically acceptable salts, isomers and the active metabolite forms thereof.

23. A method for treating a mammal having an APP processing disorder comprising preventing or reducing Aβ peptide aggregation or plaque formation in the brain of the mammal by administering to the mammal a controlled release composition comprising a therapeutically effective amount of at least one HMG-CoA reductase inhibitor.

24. The method of claim 23, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of mevastatin, pravastatin, simvastatin, atorvastatin, lovastatin, rivastatin, fluvastatin, and pharmaceutically acceptable salts, isomers and the active metabolite forms thereof.

25. A method for treating a mammal exhibiting the objective symptoms of Alzheimer's disease by administering to the mammal a composition comprising a therapeutically effective amount of at least one HMG-CoA reductase inhibitor.

26. The method of claim 25, wherein the HMG-CoA reductase inhibitor decreases the formation of Aβ peptides, increases the clearance of Aβ peptides, regulates the processing of APP, or reduces plaque maturation in the mammal.

27. The method of claim 25, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of mevastatin, pravastatin, simvastatin, atorvastatin, lovastatin, rivastatin, fluvastatin, and pharmaceutically acceptable salts, isomers and the active metabolite forms thereof.

28. The method of claim 27, wherein the HMG-CoA reductase inhibitor is lovastatin or lovastatin acid.

29. A method for treating a mammal having Down's Syndrome by administering to the mammal a composition comprising a therapeutically effective amount of at least one HMG-CoA reductase inhibitor.

30. The method of claim 29, wherein the HMG-CoA reductase inhibitor decreases the formation of Aβ peptides, increases the clearance of Aβ peptides, regulates the processing of APP, or reduces plaque maturation in the mammal.

31. The method of claim 29, wherein the HMG-CoA reductase inhibitor is selected from the group consisting of mevastatin, pravastatin, simvastatin, atorvastatin, lovastatin, rivastatin, fluvastatin, and pharmaceutically acceptable salts, isomers and the active metabolite forms thereof.

32. The method of claim 31, wherein the HMG-CoA reductase inhibitor is lovastatin or lovastatin acid.

33. A method for treating a mammal having an APP processing disorder comprising lowering the amount of cellular cholesterol levels in the mammal.

Add A'

add B'